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Bertsch et al.

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(54) **DISHWASHER DETERGENT DISPENSER**

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A47L 15/44 (2006.01)

(52) **U.S. Cl.**
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(58) **Field of Classification Search**
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USPC ..... 134/57 D, 57 DL, 56 D, 58 D, 58 DL, 93; 222/651
See application file for complete search history.

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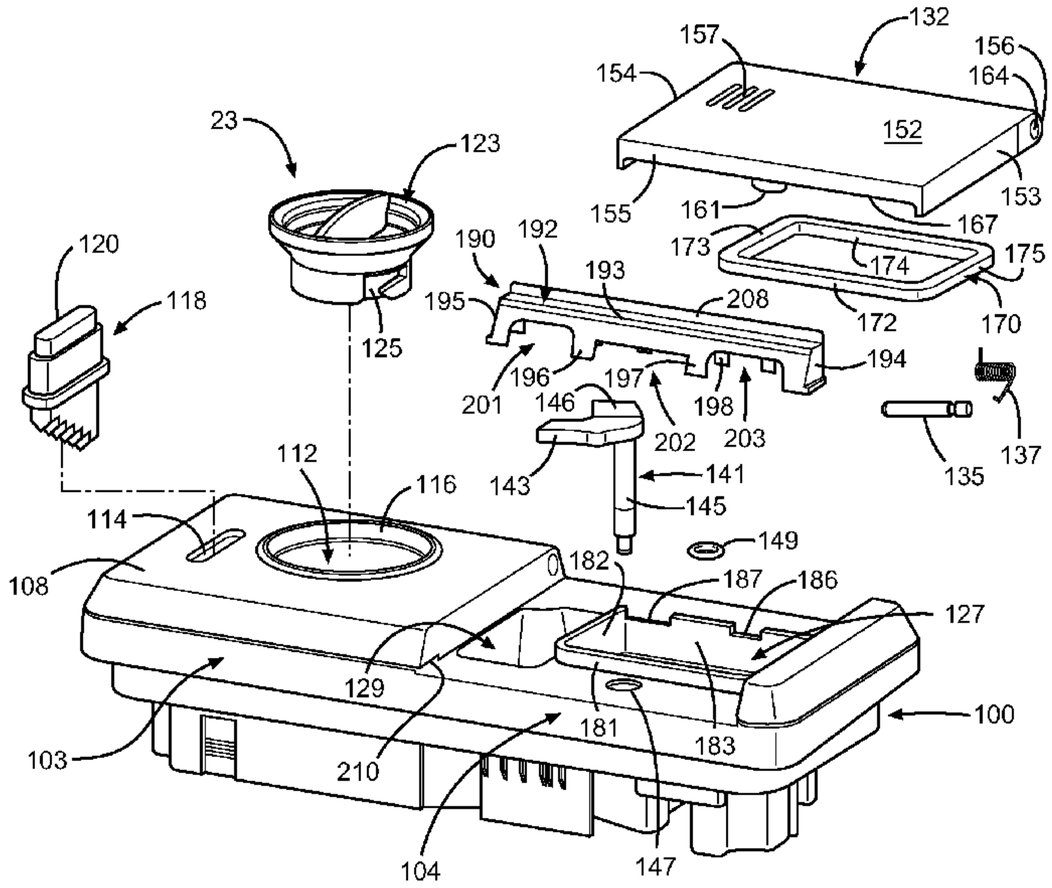
(57) **ABSTRACT**

In a dishwasher having a washing chamber capable of accommodating kitchenware for washing, a detergent dispenser includes a housing defining a chamber for receiving detergent. A lid is pivotally connected to the housing for selectively pivoting between a closed position for sealing the detergent chamber and an open position which permits washing fluid to enter the detergent chamber in connection with dispensing of detergent. The detergent chamber is provided with at least one washout port enabling washing fluid to enter the chamber, even if the lid can only pivot through a limited range to a partial open position due to an obstruction. A raised shield guard, which is spaced from the lid, extends in front of the lid to ensure that a potentially obstructing object within the washing chamber does not prevent the lid from moving to at least the partial open position during a wash cycle.

20 Claims, 4 Drawing Sheets



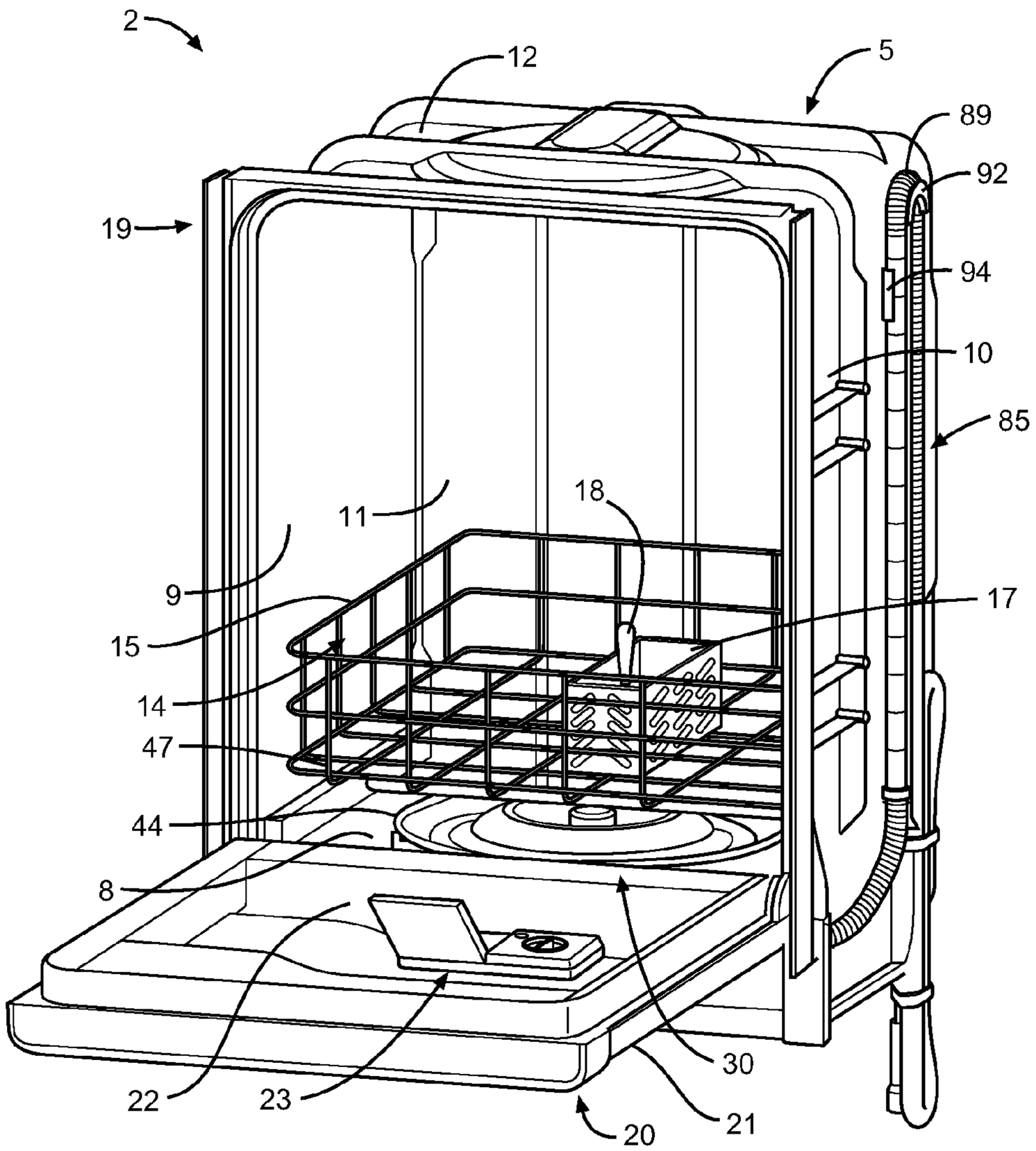
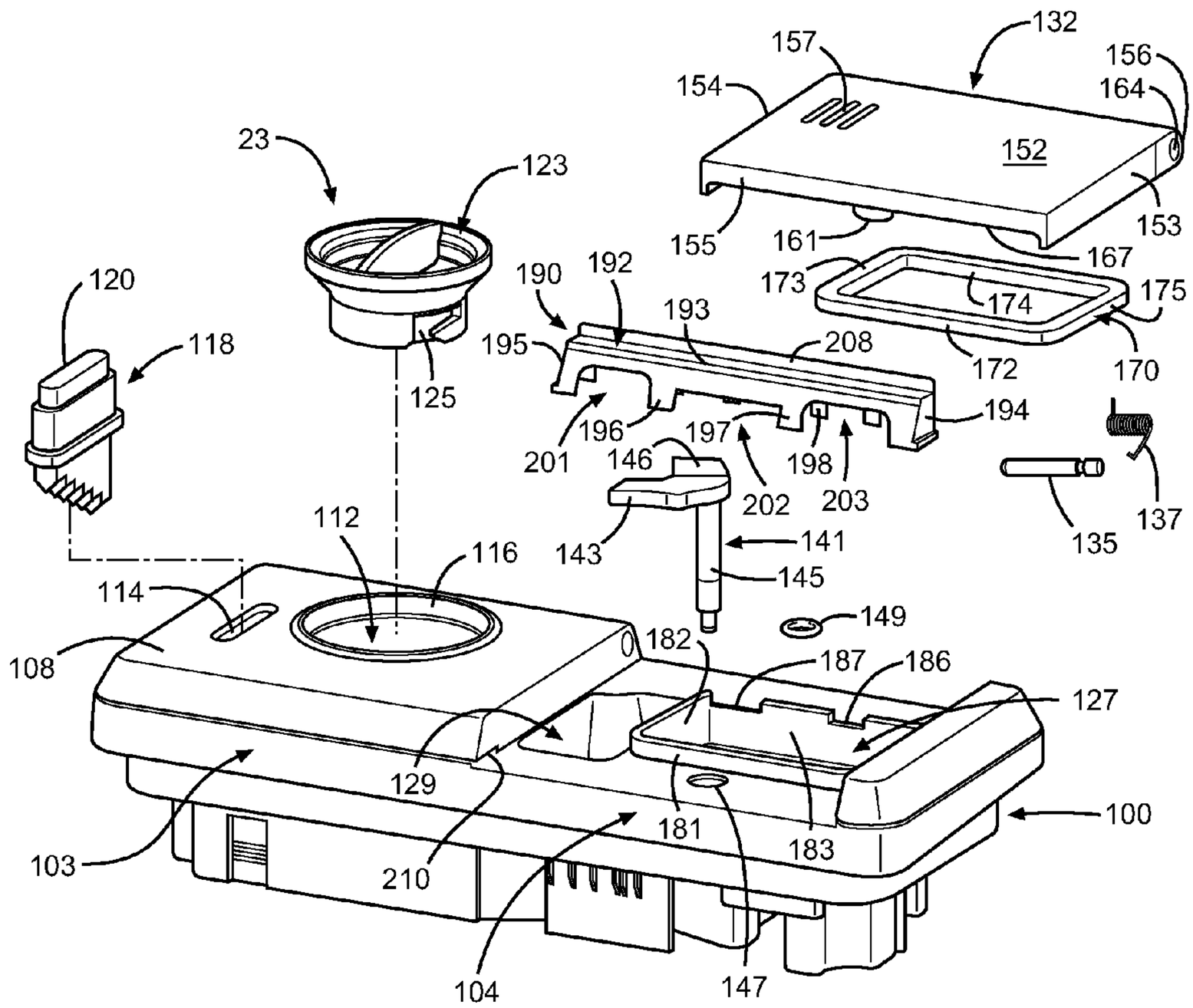


FIG. 1


132
157
156
154
164
23
152
123
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153
167
173
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192
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195
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172
170
120
118
125
196
194
201
197
146
198
202
203
112
143
141
135
137
116
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114
149
182
108
187
186
127
129
181
183
100
103
210
104
147

FIG. 2

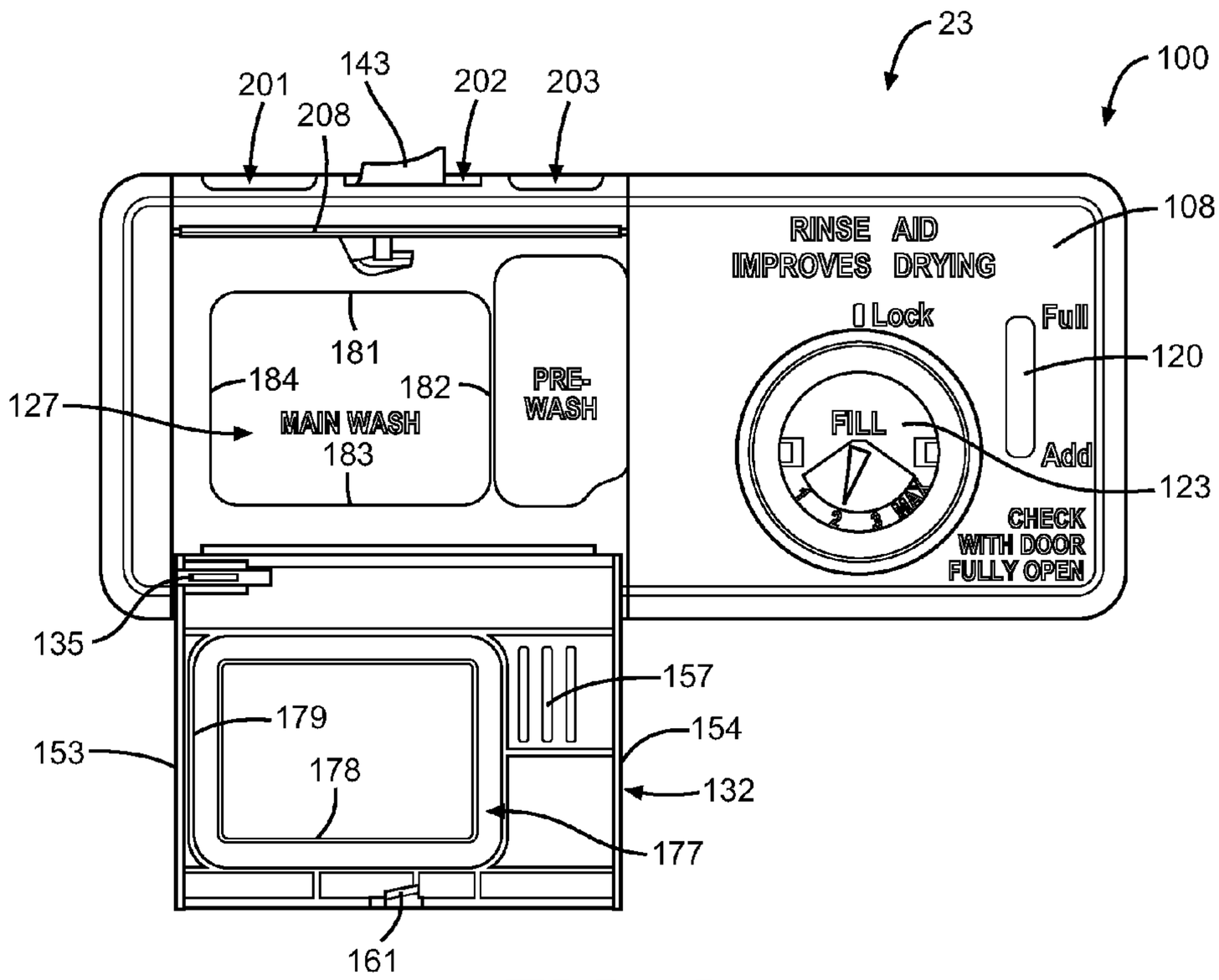
23
100
201
143
208
202
203
108
RINSE AID
IMPROVES DRYING
Lock
Full
120
181
184
182
127
MAIN WASH
183
PRE-
WASH
FILL
Add
123
CHECK
WITH DOOR
FULLY OPEN
135
157
179
154
153
178
132
177
161

FIG. 3

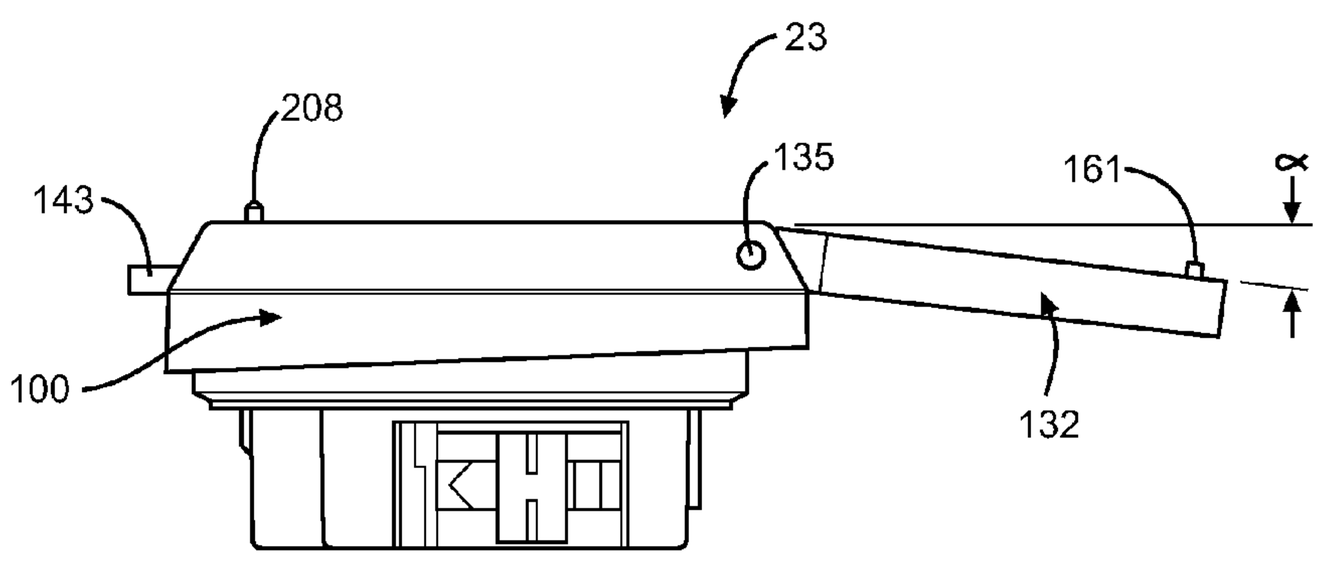
23
208
135
161
α
143
100
132

FIG. 4

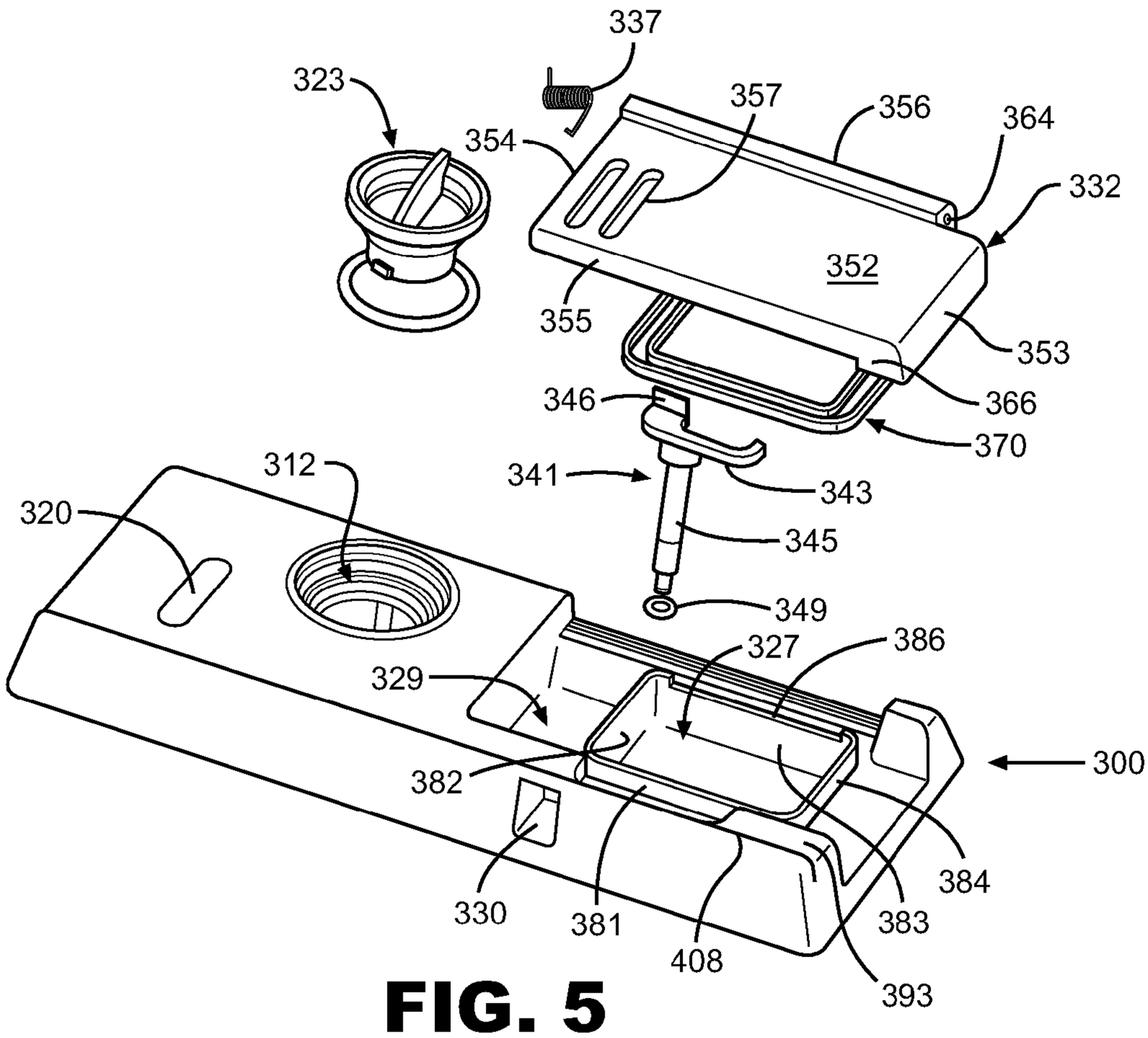
337
323
357
356
364
354
332
352
355
353
346
366
370
312
341
343
320
345
349
386
327
329
300
382
384
330
381
383
408
393

FIG. 5

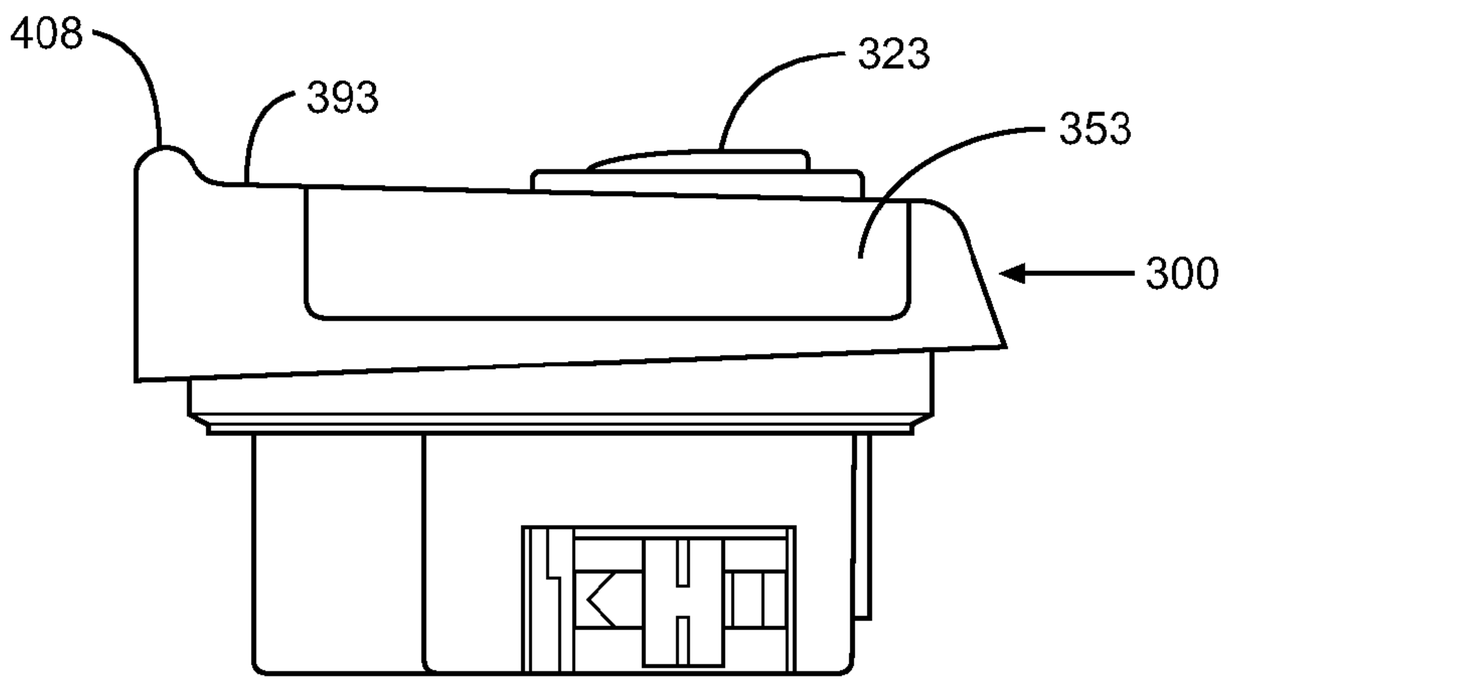
408
323
393
353
300

FIG. 6

DISHWASHER DETERGENT DISPENSER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains to the art of dishwashers and, more particularly, to a detergent dispenser for a dishwasher.

2. Description of the Related Art

Many dishwashers include a dispenser having a lid that swings open to release detergent at a specific time during a dishwasher cycle. The dispenser is often located on an interior side of a dishwasher door. While this position allows for convenient filling of the dispenser, large objects within the dishwasher may obstruct the opening of the dispenser lid. For example, if a utensil positioned in a silverware basket of the dishwasher is pressed against the dispenser door when it is set to open, the detergent will not be released such that the dishes will not be adequately cleaned.

To address this obstruction problem, it has been proposed to incorporate a lid shield into a dishwasher detergent dispenser to enable the dispenser lid to open even when an object is located in its path of movement. In particular, U.S. Pat. No. 7,207,341 discloses a dishwasher detergent dispenser including a shield extending in front of a pivoting dispenser lid to ensure that an object within the washing chamber does not prevent the lid from freely moving from a closed position covering a detergent chamber to a dispensing position during a wash cycle. To accomplish this function, the shield includes a cross member and side legs which themselves are mounted for pivotal movement relative to a dispenser housing. With this arrangement, the dispenser lid can pivot, through a limited angular range, relative to the shield and then pivot further in unison with the shield. Unfortunately, this configuration still mandates a rather large angular movement of the lid to expose the detergent chamber and enable the pre-loaded detergent to be washed into a tub of the dishwasher. In addition, the structure and mounting of the shield of this prior art results in a rather elaborate and costly production configuration.

Based on the above, there exists a need to for a dishwasher detergent dispenser which is constructed in a manner which will assure that loaded detergent will be properly and timely dispensed during a washing operation, even when the dispenser lid is obstructed from even partially opening by an object within the washing chamber of the dishwasher.

SUMMARY OF THE INVENTION

In general, the present invention is directed to a dishwasher capable of accommodating various kitchen items, such as on one or more racks provided within a washing chamber, for a washing operation, as well as a dispenser assembly including a housing defining a compartment for receiving detergent to be timely dispensed during the washing operation. A lid is connected to the housing for movement between a closed position in which the detergent compartment is covered, and a dispensing position in which the detergent compartment is exposed. The lid is preferably biased open and retained in the closed position through a releasable latch. Under normal operating conditions, the lid is not obstructed from opening. In accordance with the invention, the dispenser assembly is specifically constructed to assure that, even in the event that the lid is obstructed from fully opening for a dispensing operation, such as by tall utensils placed in a silverware basket within the washing chamber becoming lodged directly in front of the lid so as to obstruct free movement of the lid, the lid can still open to at least partially expose the detergent compartment to a flow of liquid, thereby enabling supplied detergent to be washed out of the detergent compartment.

More particularly, in accordance with a preferred form of the invention, the above objects are achieved by specifically forming the detergent compartment with at least one side wall including one or more washout ports enabling an inflow of washing liquid into the detergent compartment which, in turn, causes detergent to be washed from the detergent compartment even upon only a partial opening of the lid. Further, a shield extends in front of the lid to ensure that the lid will not be prevented from at least assuming a partially open position, even when the lid is obstructed from assuming its fully open position.

Additional objects, features and advantages of the present invention will become more readily apparent from the following detailed description of preferred embodiments when taken in conjunction with the drawings wherein like reference numerals refer to corresponding parts in the several views.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a dishwasher incorporating a detergent dispenser constructed in accordance with the present invention, with a lid of the detergent dispenser being shown between fully open and fully closed positions;

FIG. **2** is an exploded view of a detergent dispenser constructed in accordance with a first embodiment of the invention;

FIG. **3** is a front plan view of the detergent dispenser of FIG. **2**, with the lid thereof shown in an open position;

FIG. **4** is a side view of the detergent dispenser of FIG. **3**;

FIG. **5** is an exploded view of a detergent dispenser constructed in accordance with a second embodiment of the invention; and

FIG. **6** is a side view of the detergent dispenser of FIG. **5**.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

With initial reference to FIG. **1**, a dishwasher employed in connection with the present invention as generally indicated at **2**. As shown, dishwasher **2** includes a tub **5** which is preferably injection molded of plastic so as to include integral bottom, side, rear and top walls **8-12** respectively. Within the confines of walls **8-12**, tub **5** defines a washing chamber **14** within which soiled kitchenware is adapted to be placed upon shiftable upper and lower racks (the lower rack being indicated at **15**), with the kitchenware being cleaned during a washing operation in a manner widely known in the art. As shown in this figure, a utensil basket **17**, which contains a utensil **18**, is preferably positioned within lower rack **15**. Tub **5** has associated therewith a frontal portion **19** at which is pivotally supported a door **20** used to seal chamber **14** during a washing operation. Door **20** has an exterior panel **21** and an interior panel **22** preferably provided with a detergent dispenser **23** within which a consumer can place liquid or particulate washing detergent for dispensing at predetermined periods of the washing operation.

Disposed within tub **5** and, more specifically, mounted within a central opening formed in bottom wall **8** of tub **5**, is a pump and filter assembly **30**. Extending about a substantial portion of pump and filter assembly **30**, at a position raised above bottom wall **8**, is a heating element **44**. In a manner known in the art, heating element **44** preferably takes the form of a sheath, electric resistance-type heating element. In general, pump and filter assembly **30** is adapted to direct washing

fluid to a lower wash arm **47** and an upper wash arm (not shown). Dishwasher **2** has associated therewith a drain hose **85** including at least one corrugated or otherwise curved portion **89** that extends about an arcuate hanger **92** provided on an outside surface of side wall **10**. Drain hose **85** is also preferably secured to tub **5** through various clips, such as that indicated at **94**. In any event, in this manner, an upper loop is maintained in drain hose **85** to assure proper drainage in a manner known in the art. Actually, a detailed description of the exact structure and operation of pump and filter assembly **30** of dishwasher **2** does not form part of the present invention, but is rather set forth in U.S. Pat. No. 7,146,992 entitled "Dishwasher Pump and Filtration System", incorporated herein by reference.

At this point it should be realized that the particular construction and washing cycle operation of dishwasher **2** can greatly vary in accordance with the invention. Therefore, the type of dishwasher construction depicted in this figure is provided for exemplary purposes only such that the invention can be used on various dishwasher models, including drawer dishwashers. In connection with the embodiment shown in FIG. **1**, detergent dispenser **23** is actually located on interior panel **22** in a position so as to be generally adjacent to utensil basket **17** when door **20** is in a closed position. Based on this arrangement, it is possible that utensil **18** within utensil basket **17**, or perhaps other kitchenware items such as pots, a cookie sheet/baking pans or the like placed in rack **15**, may interfere with the desired operation of detergent dispenser **23**. To address this concern, the present invention is actually directed to the construction and operation of detergent dispenser **23** of dishwasher **2** as will be detailed below.

As best shown in FIGS. **2-4**, detergent dispenser **23** includes a housing **100** having a first side portion **103** and a second side portion **104**. Provided on first side portion **103** is a cover **108** which extends across a rinse aid chamber **112**. As depicted, cover **108** is provided with a slotted opening **114** and an enlarged opening **116**, both of which open to rinse aid chamber **112**. Mounted at slotted opening **114** is an elongated level indicator **118** having an upper, transparent view panel **120**. On the other hand, a rinse aid knob **123** is adapted to be sealed at opening **116**, such as through a bayonet-type connector **125**. With this arrangement, rinse aid knob **123** can be rotated, through a limited angular range of movement, to expose rinse aid chamber **112** for filling with a rinse aid, while the level of rinse aid in rinse aid chamber **112** can be visually determined through transparent view panel **120**. At the inclusion of a rinse aid in detergent dispenser **23** is known in the art and only provided here for the sake of completeness, it will not be further discussed.

More importantly, second side portion **104** of housing **100** establishes a detergent chamber **127** and a pre-wash chamber **129**. A lid **132** is pivotally mounted to housing **100** for movement between an open position exposing both detergent and pre-wash chambers **127** and **129**, and a closed position extending across both detergent and pre-wash chambers **127** and **129**. More particularly, lid **132** is mounted through pins, one of which is shown at **135**, for pivotal movement about an associated hinge axis, while being biased to the open position by a spring **137** through which pin **135** extends. When in the closed position, lid **132** is releasably secured through the use of a latch **141** having a manually engageable release portion **143**, a shaft portion **145** and a latching element **146**. Latch **141** is mounted to housing **100** for relative rotational movement, with shaft portion **145** extending into an aperture **147** of housing **100** with an interposed O-ring **149**.

In the embodiment of FIGS. **2-4**, lid **132** includes an upper or front panel **152**, a pair of opposing side walls **153** and **154**, and first and second end walls **155** and **156**. Provided in front panel **152** of lid **132** is a series of openings **157** which are exposed to pre-wash chamber **129**. In addition, projecting from a central portion (not separately labeled) of first end wall **155** is a latch member **161** which is adapted to be engaged with latch element **146** of latch **141** to retain lid **132** in the closed position. Lid **132** also includes side opening **164** for pin **135**. Finally, as best shown in FIG. **2**, first end wall **155** is shown to include a frontal cut-out portion **167**.

Lid **132** is adapted to support an annular gasket or seal **170** defined by legs **172-175**. More specifically, an interior track **177** is established on the underside of lid **132** as clearly shown in FIG. **3**. Track **177** is composed of inner and outer walls **178** and **179**. Annular seal **170** is positioned and retained in track **177** for use in connection with sealing at least a majority of the annular periphery of detergent chamber **127**. That is, detergent chamber **127** is formed by upstanding walls **181-184**. Upon the closing of lid **132**, legs **172-175** of annular seal **170** abuts and seals against upstanding walls **181-184** respectively. In accordance with the invention, upstanding wall **183** of detergent chamber **127** is formed with at least one washout port. For instance, in the preferred embodiment shown in FIG. **2**, a pair of washout ports **186** and **187** is spaced along upstanding wall **183** which, in turn, is directly adjacent and generally parallel to the hinge axis for lid **132**. As will become more fully evident below, the particular number, location and configuration of washout ports associated with detergent chamber **127** can vary in accordance with the invention. At this point it is only important to note that, due to the presence of one or more washout ports **186**, **187**, there is not a complete sealing of detergent chamber **127** by seal **170**, at least when lid **132** assumes an open position, either partially and fully, as will be discussed more fully below.

In further accordance with the invention, detergent dispenser **23** is also provided with a lid shield which, in the embodiment depicted in FIGS. **2-4**, is indicated at **190**. In the embodiment shown, lid shield **190** is formed separate from housing **100** and includes a main body **192** having an upper plateau portion **193**, side legs **194** and **195**, and a series of spaced support legs, such as those indicated at **196-198**. With this construction, main body **192** of lid shield **190** defines a plurality of lower body slotted regions, such as those indicated at **201-203**. In addition to the above structure, main body **192** of lid shield **190** includes a raised guard which is indicated at **208**. In the most preferred form of the invention, guard **208** projects above upper plateau portion **193** and extends the entire length of main body **192** which, in turn, is preferably at least as long as first end wall **155** of lid **132**.

When detergent dispenser **23** is fully assembled, a terminal portion (not separately labeled) of side leg **194** of lid shield **190** is fixedly received within an undercut **210** formed in cover **108**. In a similar manner, a corresponding terminal portion of side leg **195** is fixedly received within a respective undercut (not labeled) formed in an adjacent portion of housing **100**. This mounting between lid shield **190** and housing **300** can actually be performed in various ways known in the art, such as through the use of adhesive, welding, snap or other type of fixed connection. With this arrangement, release portion **143** of latch **141** projects from slotted region **202**, with slotted regions **201** and **203** being open on either side thereof as clearly shown in FIG. **3**. Actually, lid shield **190** can be attached to housing **100** in many different ways in accordance with the invention. Instead, what is relevant at this point in connection with this embodiment is that the structure and mounting establishes various passages beneath lid shield **190**, with the passages being defined between the various legs **194-198**, such as at slotted regions **201-203**.

At the end of a washing cycle, lid **132** is typically in the fully open position shown in FIG. **4**. In this condition, detergent chamber **127** can be manually filled with a desired cleansing detergent, whether in liquid or granulated form. At the same time, pre-wash chamber **129** can also be selected filled. Thereafter, lid **132** is rotated to its closed position against the biasing of spring **137** such that latch member **161** is engaged by latch element **146**, whereupon seal **170** seats against upper edge portions of the upstanding walls **181-184** of detergent chamber **127**.

In a manner known in the art, at a certain point in a washing cycle for dishwasher **2**, latch **141** will be shifted such that lid **132** will move from the closed position toward the open position. The structure and operation of the mechanism to timely open lid **132** and dispense the housed detergent, as well as the timed release of any rinsing aid from rinse aid chamber **112**, is not considered part of the present invention such that it will not be detailed herein. Instead, this structure and operation is known in the art, such as disclosed in co-owned U.S. patent application Ser. No. 11/700,005 entitled "Dispenser for a Drawer-Type Dishwasher" filed Jan. 31, 2007 and incorporated herein by reference. As indicated above, the full opening of lid **132** can be obstructed, such as by utensil **18** within utensil basket **17**, or other kitchenware items including pots or pans, which become lodged across lid **132** and prevent lid **132** from properly assuming its fully open position. However, since lid shield **190** extends across housing **100** directly adjacent lid **132** and includes raised guard **208** in accordance with an aspect of the invention, any potentially obstructing kitchenware item will actually contact raised guard **208**, while being spaced from lid **132** at least when lid **132** is closed and latched. Even if the kitchenware item obstructs lid **132** from moving to the full open position, the positioning and structure of lid shield **190** still assures that lid **132** will be able to at least partially open, generally in the order of about 5-15°. Even this limited degree of movement by lid **132** causes seal **170** to become unseated, particularly leg **172** from the upper periphery of wall **181**. This action, in combination with the inclusion of one or more washout ports **186**, **187** assures that washing fluid will be caused to enter into detergent chamber **127** and both the entering washing fluid and the contained detergent to flow out of detergent chamber **127** and into tub **5**. That is, washing fluid will be permitted to flow from between lid **132** and housing **100** into detergent chamber **127** through washout ports **186** and **187** and there will be a gap, guaranteed based on the positioning and structure of lid shield **190**, at first end wall **155** to enable the washing fluid and detergent to flow over wall **181**. With the inclusion of the various slotted regions, such as at **201-203**, the washing fluid and detergent will then be able to flow right into tub **5**. In this manner, the complete flushing of detergent chamber **183** is assured.

Obviously, if not obstructed, lid **132** can fully open based on the biasing force of spring **137**. Certainly, assuming the fully open position is desired for at least filling of detergent chamber **127** and/or prewash chamber **129**. In accordance with the overall invention, lid **132** has a preferred range from fully closed to fully open which exceeds 180°, most preferably about 190-200° as illustrated with the angle α beyond the 180° mark. With this arrangement, full and complete access to detergent chamber **127** and pre-wash chamber **129** is assured for the adding of a liquid or solid detergent.

Based on the above, it should be readily apparent that the provision of one or more washout ports **186**, **187** in accordance with the invention assures that detergent chamber **127** will be exposed to the flow of washing fluid needed to flush detergent from chamber **127** during a washing cycle. If no obstruction to the opening of lid **132** exists, washout ports will simple enable an increased flow rate of washing fluid into detergent chamber **127**. However, if there does exist an obstruction or other reason which prevents lid **132** from fully opening, washout ports **186**, **187** will still provide for a requisite amount of washing fluid flow into detergent chamber **127** is enable the proper cleaning of the kitchenware placed in dishwasher **2** for cleaning. With the inclusion of lid shield **190**, and particularly guard **208** extending beyond lid **132** in the direction of opening of lid **132**, lid **132** will certainly be able to open, at least to the extent needed to permit flushing of the detergent from detergent chamber **127** in combination with washout ports **186**, **187**. In this particular embodiment described, lid shield **190** is also advantageously structured to establish lower passages at slotted regions **201-203** to accommodate the flow of washing fluid and detergent, while also providing a recessed region for release portion **143** of latch **141**.

To further illustrate the invention, FIGS. **5** and **6** will now be referenced to describe certain potential variations for a detergent dispenser constructed with the features and advantages described above. In a manner similar to the embodiment of FIGS. **2-4**, these figures illustrate a dispenser assembly including a housing **300** provided on one side portion thereof with a rinse aid chamber **312** and a transparent view panel **320**. Rinse aid chamber **312** can be sealed by means of a rinse aid knob **323** and an associated gasket (not labeled). In another side portion of housing **300** is formed a detergent chamber **327** and a pre-wash chamber **329**. As shown, this side portion of housing **300** is also formed with an outlet port **330** which is actually open to rinse aid chamber **312** in order to provide a direct flow path into tub **5** for any rinse aid. Of course, both detergent chamber **327** and pre-wash chamber **329** are adapted to be selectively covered by a lid **332** which is biased open by means of a spring **337**. As with the prior described embodiment, a latch **341**, including a shaft portion **345**, a manually engageable release portion **343**, a latching element **346** and an associated mounting O-ring **349**, is provided to releasably secure lid **332** in the closed position.

For the sake of completeness, this embodiment depicts lid **352** with an upper or front panel **352**, a pair of opposing side walls **353** and **354**, and first and second end walls **355** and **356**. A body portion of lid **352**, adjacent end wall **356**, includes a side aperture **364** for pivotally mounting lid **352** to housing **300** in a manner directly corresponding to that described above. In addition, lid **352** is shown to include a series of openings **357** exposed to pre-wash chamber **329** and a down-turned portion **366** at one end of first end wall **355**. Also in a manner directly corresponding to the embodiment of FIGS. **2-4**, lid **352** carries a seal **370** which is designed to seat against upstanding walls **381-384** of detergent chamber **327** when lid **352** is closed. In the embodiment shown, housing **300** is formed with a recessed region (not separately labeled) directly adjacent wall **381** within which latch **341** is positioned for limited angular rotational movement between latching and release positions, with latching element **346** being adapted to interengage with a latching member (not shown) carried on the underside of lid **352** in a manner known described above and known in the art.

At this point, it should be realized that the exemplary configuration of this embodiment reinforces the notion that the actual construction of the housing, latch, lid and the like of the dispenser utilized in connection with the present invention can greatly vary. Instead, important in connection with the present invention is the inclusion of one or more washout ports associated with detergent chamber **327**. In this embodiment, wall **383** of detergent chamber **327** is provided with an

upper, elongated cut-out portion defining a single washout port indicated at **386**. In addition, housing **300** is, in this embodiment, integrally formed with a lid shield having an associated plateau portion **393** and raised guard **408** (see both FIGS. **5** and **6**).

As with the previously described embodiment, the arrangement of FIGS. **5** and **6** also advantageously ensures that even an extremely limited angular rotational release of lid **352** toward its open position will provide for a flow of washing fluid into detergent chamber **327** through washout port **386**, thereby guaranteeing that detergent placed in detergent chamber **327** will be dispensed into tub **5** as needed for a proper washing cycle. This limited angular movement is defined by the minimal movement of lid **352** needed to unseat seal **370** from at least wall **381**. In addition, the inclusion of raised guard **408** provides the function of spacing any obstructing kitchenware away from lid **352**, at least to the extent which will still enable the limited angular movement. Of course, even in the absence of the raised guard **408**, the inclusion of the washout port **386** would beneficially provide for the desired fluid flow through detergent chamber **327** unless a kitchenware item directly abutted and completely prevented lid **352** from opening an amount necessary to unseat seal **370**. In any case, based on the above, it should be apparent that both of the embodiments described above provide for the inclusion of one or more washout ports for the dishwasher detergent dispenser and can also include an associated lid guard for use in combination with the washout port(s).

Although described with reference to preferred embodiments of the invention, it should be readily understood that various changes and/or modifications can be made to the invention without departing from the spirit thereof. For instance, different shield structure may be used while still performing a shielding function by protecting the dispenser from utensils, pots, pans or the like. In addition, various types of latch mechanisms may be employed to hold the lid in the closed position. Furthermore, the shield member may be constituted by a fixed member mounted to an area within the washing chamber or on the interior panel, rather than being mounted to the housing of the detergent dispenser, wherein the lid could still be protected but could pivot. Still further, the washout ports can be formed in additional ways, including providing holes or bores leading to the detergent dispenser below the lid. Finally, it should be recognized that the dispenser of the invention could be located at numerous locations and employed in various dishwasher models, including drawer dishwashers. In general, the invention is only intended to be limited by the scope of the following claims.

What is claimed is:

1. A dishwasher comprising:

a tub defining a washing chamber accommodating kitchenware to be washed with washing fluid during a washing operation; and

a detergent dispenser including:

a housing mounted within the dishwasher and exposed to the tub, said housing defining a detergent chamber for receiving detergent to be dispensed into the tub during the washing operation and being provided with at least one washout port opening into the detergent chamber;

a lid mounted for movement between a closed position in which the detergent chamber is covered and an open position in which the detergent chamber is exposed;

a latch for releasably retaining the lid in the closed position; and

a shield member spaced from and extending across at least a portion of the lid to prevent the lid from being obstructed by kitchenware in the washing chamber, with the shield member enabling the lid to assume at least a partially open position between the closed and open positions during the washing operation and the at least one washout port configured to enable washing fluid to enter the detergent chamber through the at least one washout port to flush detergent from the detergent chamber;

wherein the shield member is coupled to the housing such that the shield member does not move relative thereto.

2. The dishwasher according to claim **1**, wherein the at least one washout port is located below the lid.

3. The dishwasher according to claim **2**, wherein the detergent chamber is defined by a plurality of upstanding walls, the at least one washout port being formed in one of the plurality of upstanding walls.

4. The dishwasher according to claim **3**, wherein the at least one washout port being defined by a cut-out formed in the one of the plurality of upstanding walls.

5. The dishwasher according to claim **4**, wherein the at least one washout port is defined by a pair of spaced cut-outs formed in one of the plurality of upstanding walls.

6. The dishwasher according to claim **3**, further comprising a seal mounted to an underside of the lid, said seal being seated against the plurality of upstanding walls when the lid is in the closed position, said seal becoming unseated from another one of the plurality of upstanding walls when the lid assumes the partially open position.

7. The dishwasher according to claim **6**, wherein the another one of the plurality of upstanding walls is arranged opposite the one of the plurality of upstanding walls formed with the at least one washout port.

8. The dishwasher according to claim **2**, wherein the lid is pivotally mounted for movement about a hinge axis between the open and closed positions, said at least one washout port being arranged directly adjacent the hinge axis.

9. The dishwasher according to claim **8**, wherein the lid is pivoted from the closed position to the open position through an angle greater than 180°.

10. The dishwasher according to claim **9**, further comprising a spring biasing the lid to rotate about the hinge axis to the open position.

11. The dishwasher according to claim **1**, wherein the shield member includes a guard, which is spaced from the lid, extends along the lid and projects beyond the lid, for preventing kitchenware from obstructing the movement of the lid to at least the partially open position.

12. The dishwasher according to claim **11**, wherein the shield member includes a plateau portion from which the guard projects.

13. The dishwasher according to claim **11**, wherein the shield member is supported from the housing by a plurality of legs which are spaced to define slotted regions through which washing fluid can flow.

14. The dishwasher according to claim **13**, wherein the latch includes a manual release portion which projects through one of the slotted regions.

15. The dishwasher according to claim **11**, wherein the guard is integrally formed with the housing.

16. A dishwasher comprising:

a tub defining a washing chamber accommodating kitchenware to be washed with washing fluid during a washing operation; and

a detergent dispenser including:

a housing mounted within the dishwasher and exposed to the tub, said housing defining a detergent chamber for receiving detergent to be dispensed into the tub during the washing operation and being provided with at least one washout port opening into the detergent chamber;

a lid mounted for movement between a closed position in which the detergent chamber is covered and an open position in which the detergent chamber is exposed;

a latch for releasably retaining the lid in the closed position; and

a shield member spaced from and extending across at least a portion of the lid to prevent the lid from being obstructed by kitchenware in the washing chamber, with the shield member enabling the lid to assume at least a partially open position between the closed and open positions during the washing operation and the at least one washout port configured to enable washing fluid to enter the detergent chamber through the at least one washout port to flush detergent from the detergent chamber;

wherein the lid further has a hinge axis, the shield member being coupled to the housing at a position opposite the hinge axis of the lid and supported from the housing by a plurality of legs which define slotted regions through which washing fluid can flow from the at least one washout port.

17. The dishwasher according to claim **16**, wherein the shield member further has a first end and a second end, a first leg of the plurality of legs being located between the first end and the second end.

18. The dishwasher according to claim **17**, wherein the shield member further has a longitudinal axis running between the first end and the second end that divides the shield member into a front portion and a rear portion, with the first leg being located in the front portion and a second leg of the plurality of legs being located in the rear portion.

19. The dishwasher according to claim **18**, wherein the shield member further has third and fourth legs of the plurality of legs, the third leg being located at the first end of the shield member and the fourth leg being located at the second end of the shield member.

20. The dishwasher according to claim **16**, wherein the plurality of legs includes at least three spaced legs, the at least three spaced legs defining the slotted regions.

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